



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,254	10/16/2003	Michael L. Lightstone	NVID-072/00US	4561
23419 7590 10/02/2007 COOLEY GODWARD KRONISH LLP ATTN: Patent Group Suite 1100 777 - 6th Street, NW Washington, DC 20001			EXAMINER RAO, ANAND SHASHIKANT	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 10/02/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Office Action Summary</p>	Application No. 10/688,254	Applicant(s) LIGHTSTONE ET AL.	
	Examiner Andy S. Rao	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/21/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's arguments filed on 7/19/07 with respect to claims 1-32 have been fully considered but they are not persuasive.
2. Claims 1-29 remain rejected under 35 U.S.C. 102(b) as being anticipated by Ribas-Corbera, as was set forth in 3/26/07.
3. The Applicant's present three arguments contending the Examiner's previous rejection of claims 1-32 under 35 U.S.C. 102(b) as being anticipated by Ribas-Corbera, as was set forth in 3/26/07, said arguments being put forth in support of originally presented claims 1-29 and currently amended claims 30-32. However, after a careful consideration of the arguments presented and further scrutiny of the applied reference, the Examiner must respectfully disagree and maintain the applicability of the Ribas-Corbera reference as the basis grounds of rejection against the amended claims.

After summarizing the teachings of the reference (Amendment of 8/21/07: page 13, lines 14-21), the Applicants argue that Ribas-Corbera fails to read upon "...1 having "...a selector configured to select a maximum permissible quantization step size from said first quantization step size and said second quantization step size..." as being operative with a VBR and CBR controllers as in claims 1 and 30 (Amendment of 8/21/07: page 13, lines 23-29; page 14, lines 1-27; page 15, lines 1-12). The Examiner respectfully disagrees. While the reference is mainly concerned with tighter control in the implementation of its VBR controller and the selection of the maximum permissible quantization step size as the applicant has noted (Amendment of 8/21/07: page 14, lines 13-27; page 15, lines 1-2), the Examiner notes that Ribas-Corbera

Art Unit: 2621

discloses also advantageously implementation a CBR method in lieu of the VBR method (Ribas-Corbera: column 11, lines 4-9). The use of the “true CBR” has its own quantization step size which has a maximum (Ribas-Corbera: column 10, lines 1-10) that is close to average bit rate (Ribas-Corbera: column 9, lines 25-35). As such, the Examiner maintains that the limitation is met.

Secondly, the Applicants argue that reference fails to disclose using complexities of current pictures as in the claims (Amendment of 8/21/07: page 15, lines 13-29; pages 1-6). The Examiner respectfully disagrees. It is noted that Ribas-Corbera discloses that the complexity parameters are generated for not just the past frames of past GOPs, but also for frames of the current GOP (Ribas-Corbera: column 5, lines 10-15: “...are carried out for all the other groups...”). As such, the Examiner maintains that current complexities are also used, as in the claims.

Lastly, the Applicants argue that Ribas-Corbera fails to disclose the “long-term average bit rate...” limitation as in the claim (Amendment of 8/21/07: page 16, lines 6-12). The Examiner respectfully disagrees. It is noted that the citation discloses the tracking of the average bit rate over “groups of GOPS” and not just a singular GOP (Ribas-Corbera: column 7, lines 55-65: step 200). This interval is actually settable based on the speed factor that one desires to distribute extra bits over the interval and how that interval would affect the long term average bit rate (Ribas-Corbera: column 9, lines 10-20). As such, the Examiner maintains that the broadly claimed “long-term average bit rate”, as it is unclear from the language of the claims what “long-term” could be construed to be, is met by the reference’s reliance on the multiple GOP configuration.

A detailed rejection of claims 30-32 follows.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 30-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Ribas-Corbera.

Ribas-Corbera discloses a method of rate control (Ribas-Corbera: figure 6) in a video compression encoder (Ribas-Corbera: figure 5), comprising: generating a first quantization step size using a constant bit rate encoder (Ribas-Corbera: column 11, lines 1-10); forming a second quantization step size using a variable bit rate encoder (Ribas-Corbera: column 11, lines 45-53); and selecting a maximum quantization step size (Ribas-Corbera: column 9, lines 25-35) from said first quantization step size and said second quantization step size (Ribas-Corbera: column 9, lines 25-35) for use in quantizing compressed video data (Ribas-Corbera: column 8, lines 25-45), as in the claim.

Regarding claims 31-32, Ribas-Corbera discloses wherein said forming comprises: tracking long-term average bit rates (Ribas-Corbera: column 7, lines 55-65) using a proportional integral encoder (Ribas-Corbera: column 12, lines 55-67), as in the claim.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

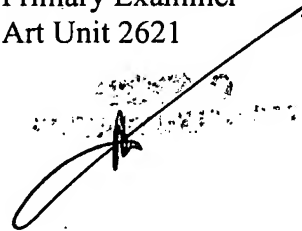
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao
Primary Examiner
Art Unit 2621

asr
March 22, 2007

A handwritten signature in black ink, appearing to read 'ASR', is written over a faint, circular official stamp. The signature is fluid and cursive.